TCIF Screening Process
for Local Air Quality Impacts

The goal of this screening process is to encourage project developers to design projects that improve regional air quality and that do not cause a negative local air quality impact. This screening concept would provide project developers a means of identifying where projects have met this goal. This supplements the long-standing methods for assessing regional impacts.

The CTC Guidelines incorporate a corridor and air basin screening element, which should include an evaluation of potential local impacts. A procedure for local impact analysis is important to address those situations where a significant local impact would occur in the absence of design changes or other mitigation approaches. Most projects that are positive from a regional air quality standpoint would not be expected to have a negative local impact. However, a screening procedure is needed to identify those projects that might be a problem from a local air quality perspective. If the screening analysis shows a potential negative impact, the next step could be one of two options. Mitigation could be incorporated based on the screening assessment, or the project design and its air quality impacts could be further evaluated before reaching a final conclusion on the need for mitigation.

From a public health perspective, local impact screening is needed to address community level exposures to diesel particulate emissions. The corridor or air basin analysis would address regional air quality issues of ozone and particulate formation. Answering a series of screening questions could serve as the first tier analysis for assessing the potential for localized impacts from diesel particulate emissions at the community level. This type of approach underlies the Air Resources Board's Air Quality and Land Use Handbook (2005) developed as part of the Board's environmental justice program. The screening questions are:

1. **Does the project provide a regional air quality benefit?** For example, is the project expected to result in a net reduction of regional emissions? If yes, then…

2. **Does the project increase the expected future level of polluting activity in specific neighborhoods or communities?** This could be answered in terms of number of diesel truck trips or hours of operation of locomotives compared to what is expected without the project. If yes, then…

3. **Does project design avoid or mitigate any emission increases resulting from the increased activity?** Projects with positive regional air quality impacts may inherently lack negative local impacts, or if there are impacts they may be mitigated as part of project design. If a review shows either scenario is the case, the screening analysis would be considered complete. If not, the potential for residual risk at the community level should be assessed. If no, then…

4. **Does a screening assessment show localized impacts?** The Air Resources Board staff can provide information on the relative risk from diesel truck and locomotive emissions at various distances. This would be simplified screening information based on Air Resources Board staff's technical efforts related to truck and rail yard risk analysis, avoiding the need for project-by-project modeling analysis as part of the screening. If yes, then…

5. **Are there mitigation opportunities in the impacted area?** The Air Resources Board and major air pollution control districts can provide technical assistance in identifying potential mitigation opportunities in affected areas. Funds to address current air quality problems are oversubscribed, so there are cost-effective opportunities to clean up existing transportation sources as a means of mitigating new impacts. Air agencies can also provide cost information for use in calculating the incremental cost of mitigation relative to overall project costs.

Implementation of the Local Impact Screening Process

Project developers need to provide the basic information necessary to demonstrate that the proposed project will have a regional air quality benefit. The methods for assessing regional impacts are well established. Once a project has demonstrated affirmatively its regional benefit, local impact screening can proceed.

Answering the first two questions of the screening process will draw directly on the activity information needed to demonstrate regional benefit. For the local impact screening analyses, the key health risk to evaluate is cancer from exposure to diesel particulate. Emission data are readily available from Air Resources Board's emissions models for on and off-road diesel trucks, and engines. Air Resources Board staff is developing simple to use technical resource materials to address the third screening question. These materials are intended to provide a means of generally identifying potential cancer risk from diesel particles for project types based on basic parameters such as distance from the project and activity level.

CTC staff will consult with Air Resources Board staff to determine if project developers have adequately addressed the screening questions within their proposals. The answers to the screening questions will also serve as the basis of CTC staff's evaluation of the air quality impacts of the projects as part of their recommendations for project funding. And Air Resources Board staff will consult with CTC staff during post-screening project evaluation process.